

Weekly Report 07/20/2014

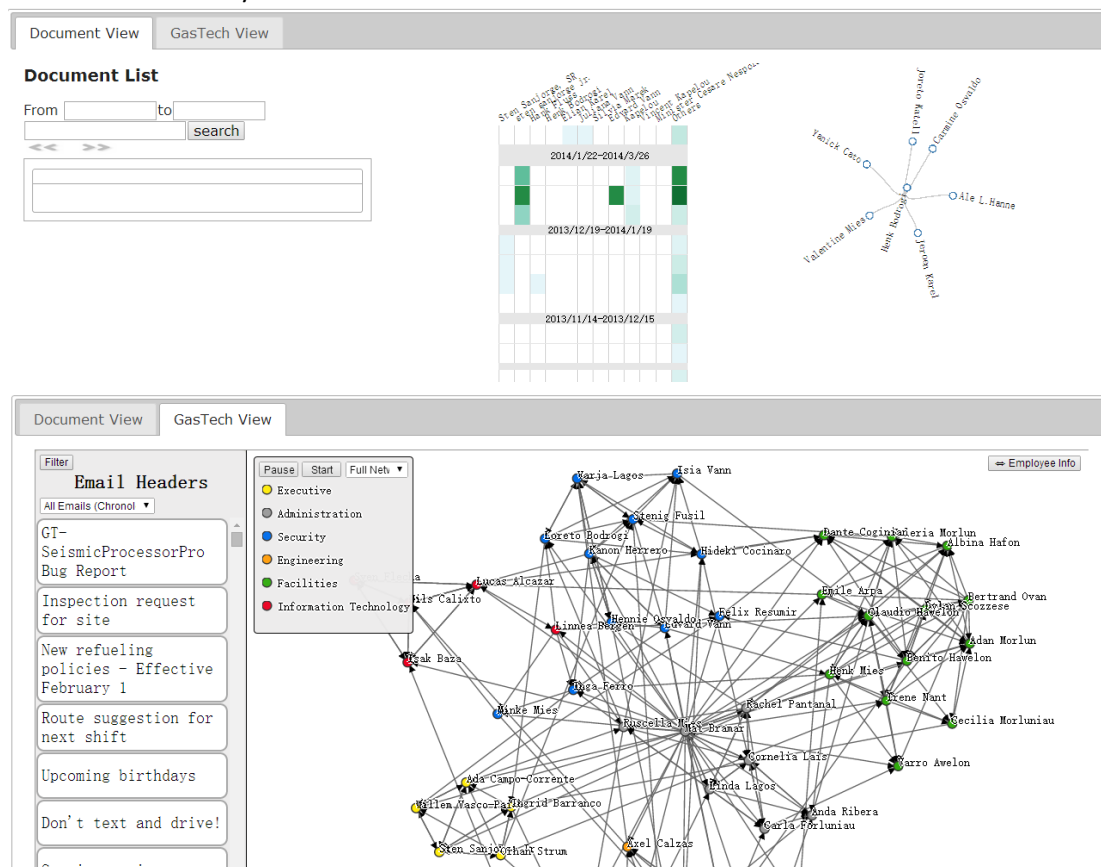
VAST Project

The tasks of the first challenge are to find out the organization network and timeline of what happened. We enhanced several features of the initial visualization design, including highlighting, tag layout, time alignments. The answer sheet and demo video can be accessed from the links below:

http://pixel.ecn.purdue.edu:8080/~zhan1486/MC1_answer_sheet/index.htm

http://pixel.ecn.purdue.edu:8080/~zhan1486/MC1_answer_sheet/MC1_tree.wmv

To solve the grand challenge, we provided two APIs with the second challenge: one is to query car and card activities of one or more employees; the other is to search news documents for any given keywords. The system of the second challenge calls our system by passing parameters via the link of our web system.

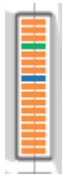


TopK Project

For the latent rank project, Yumeng and I designed tasks and user study questions for users to answer (attached as appendix). And based on the tasks, we simplified visual design of our system in the following perspectives:

1. The main visualization is still the rank difference view. Color will be used for encoding the original, rank rather than rank difference, of the rank item.

2. Instead of visualizing all clusters initially, clusters will only be formed after user selection. And for clusters, only difference (rising or falling) to its last rank will be color encoded (see below).



3. Bands are designed to separate “lanes” of rank difference. With such design, users can notice dramatic changes of certain time point by looking at width of bands.

Data Inspection Project

I’ve taken over Wanqi’s part for this project. During the last week, I’m learning all the framework and web-end code architecture. I’ll start implementing the view-based layout of our system.

APPENDIX

Perception of Latent Rank Evolutions

Perception of involving pattern of single rank item

1. What's the involving pattern of item "Steve Jobs"
 - a) Mostly steady
 - b) Mostly up and down
 - c) Sometimes steady sometimes up and down
2. What's the involving pattern of item "Lady Gaga"
 - a) Mostly steady
 - b) Mostly up and down
 - c) Sometimes steady sometimes up and down
3. What's the involving pattern of item "Wikipedia"
 - a) Mostly steady
 - b) Mostly up and down
 - c) Sometimes steady sometimes up and down

Perception of involving pattern of item cluster

4. Find the items that share similar involving pattern with item "Steve Jobs"
5. Find the items that share similar involving pattern with item "Lady Gaga"
6. Find the items that share similar involving pattern with item "Wikipedia"

Perception of involving pattern of overall rank

7. What's the involving pattern of the overall rank during (period#1)
 - a) Mostly steady
 - b) Mostly up and down
 - c) Sometimes steady sometimes up and down
8. What's the involving pattern of the overall rank during (period#2)
 - a) Mostly steady
 - b) Mostly up and down
 - c) Sometimes steady sometimes up and down
9. What's the involving pattern of the overall rank during (period#3)
 - a) Mostly steady
 - b) Mostly up and down
 - c) Sometimes steady sometimes up and down

10. When is the time that the rank changes dramatically? (write 3 time point)

Post user study Interview Questions

Gender:

Age:

Education Level:

1. Evaluation of Visual Representations

Visual Representation	Usability	Low to high (1 to 5 scale)
Single Rank Item	How much did you understand the visual representation of rank items in rank difference view?	1 2 3 4 5 Reason?
	How much useful the rank items are to understand the involving pattern of a single rank item?	1 2 3 4 5 Reason?
Item Cluster	How much did you understand the visual representation of item clusters in rank difference view?	1 2 3 4 5 Reason?
	How much useful the item clusters are to understand the involving pattern of items with similar involving trend?	1 2 3 4 5 Reason?
Overall Rank	How much did you understand the visual representation of overall rank in rank difference view?	1 2 3 4 5 Reason?
	How much useful the overall rank flow is to understand the overall involving pattern of a rank?	1 2 3 4 5 Reason?

2. Evaluation of visual representation

Do you think our rank difference view is intuitive or not intuitive for visualizing involving pattern of latent rank? (5 is the most aesthetic)	1 2 3 4 5 Reason?
Do you think our visual representations are visually aesthetic or not visually aesthetic? (5 is the most aesthetic)	1 2 3 4 5 Reason?

--	--

3. Usability

Is our system easy or not easy to use for visualizing involving pattern of latent rank? (5 is easiest)	1 2 3 4 5 Reason?
--	------------------------------

4. If you feel any difficulty during this study, please write about it.

Thank you for your time.